Effects of Sexual Harassment on Job Satisfaction, Retention, Cohesion, Commitment and Unit Effectiveness: The Case of the Air Force

Dr. Brenda L. Moore

University at Buffalo

State University of New York



DEFENSE EQUAL OPPORTUNITY MANAGEMENT INSTITUTE DIRECTORATE OF RESEARCH

Directed by Dr. Daniel P. McDonald, Director of Research Summer 2010

Abstract

Focusing on 98 Air Force units, this study examines the relationship between sexual harassment, retention, unit cohesion, commitment, and unit effectiveness. Data for the analysis were drawn from the 2009 Defense Equal Opportunity Climate Surveys (DEOCS). The data were grouped by units according to AFECOID (a unit designator), and the effects of sexual harassment on job satisfaction, retention, unit effectiveness, and unit cohesion were examined. Among the findings, sexual harassment has a strong significant negative effect on perceived unit effectiveness and percent retention (at the .01 level), and a significant effect on unit cohesion (at the .05 level), but no significant effect on job satisfaction or unit commitment.

Opinions expressed in this report are those of the author(s) and should not be construed to represent the official position of DEOMI, the U.S. military services, or the Department of Defense.

Table of Contents

Abstract	1
Contents	2
Introduction	3
Previous Studies	8
Hypotheses	11
Data and Methods	12
Data	12
Variable Selection	13
Method	14
Results	15
Discussion and Concluding Remarks	16
References	18
Footnotes	24

List of Tables

Table 1. Demographic Variables of U.S, Air Force Military Personnel	
(DEOCS FY 2009)	25
Table 2. Correlation Matrix	26
Table 3. Linear Regression Results Predicting Effects of Sexual Harassment	
Controlling for Age and Gender	27

List of Figures

Figure 1. Percent Age	28
Figure 2. Percent Deployed	29
Figure 3. <i>Retention</i>	30

Introduction

Leading military scholars have argued that the armed services of western democracies have been moving toward a *postmodern military*. Among the many structural changes taking place in a *postmodern military*, is that the role of women has expanded to almost all areas of the military in the direction of full integration (Moskos et al., 2000). Perhaps the most recent step toward full gender integration in the U.S. military is the approval for women to serve on submarines. The new Trident guided missile submarine is large enough to accommodate both women and men without the Navy's previous concerns about privacy. The fact that women soldiers now co-locate with combat units in Iraq is yet another change reflecting the expanded role of military women. Since 2003, women have been accompanying U.S. Marine combat units on patrol and house-to-house searches in Iraq, despite the Department of Defense's policy banning women from serving in direct combat.¹

The current study examines the relationship between sexual harassment, retention, cohesion, commitment, job satisfaction, and perceived unit effectiveness among Air Force units. Air Force units were selected for this study because of their high percentages of women. In addition, previous studies have shown that high percentages of female Air Force employees revealed that they had experienced sexual harassment while working (USMSPB, 1995). In 2007, women comprised 20% of the Air Force, the largest proportion of women of any of the other active services (DEOMI).² Studies by the U.S. Merit System Protection Board (USMSPB) have shown sexual harassment to be particularly high among Air Force women. Of the Air Force women employees in the USMSPB's 1994 survey, 49% indicated that they had been sexually harassed.

However, other, more recent reports published by the Defense Manpower Data Center consistently show that men and women in the Air Force are not as likely to experience sexual harassment as are men and women in the other services. Similarly, the DEOCS indicates that from FY 2007–FY 2010 approximately 6% of the active duty Air Force men and women reported that they had been sexually harassed in the last 12 months. This is compared to 7% of the service members in the Army and Coast Guard, and close to 8% of the service members in the Navy. By contrast, reporting of sexual harassment by non-service members for the same period (FY 2007-2010) was much higher at 10%.

Sexual harassment is defined as unwanted sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature.³ Concomitant with the dramatic increase in the number of women serving in the military, particularly in roles that have been previously filled exclusively by men, the issue of sexual harassment becomes more visible. As reflected in the FY 2009 Defense Equal Opportunity Climate Surveys (DEOCS), 6.4% of the sample (N=538,917) reported having been sexually harassed within 12 months prior to the survey. Although men are sexually harassed in the workplace, it is evident that women are usually targeted for this act and men are usually perpetrators (Marin & Guadagno, 1999; Gruber, 1997; USMSPB, 1995; Fitzgerald & Shullman, 1993). Women are also more likely to define a behavior as being sexual harassment (Gutek, Morasch, & Cohen, 1983). Most of the men and women, who have been sexually harassed in the workplace, have been harassed by a coworker or another employee (USMSPB, 1995).

Sexual harassment has only become unlawful in recent years. Male aggression and women passiveness is largely viewed as mere differences in sex-roles rather than an encroachment on women's rights. However, this norm came under heavy scrutiny in the

seventies. In 1979, the Office of Personnel Management (OPM) recognized sexual harassment as being a problem in the federal work place. Seven years later, the U.S. Supreme Court ruled sexual harassment to be a violation of Title VII of the 1964 Civil Rights Act. In 1981 the U.S. Merit System Protection Board (USMSPB) reported that 42% of all federally employed women surveyed indicated that they had been sexually harassed while working. Many of these women stated that they had been victimized repeatedly (USMSPB, 1981). A follow-up study in 1987 also revealed that 42% of working women stated they had received unwanted sexual attention while on the job. USMSPB replicated the study in 1994 and found that 44% of the women surveyed indicated that they had been sexually harassed while at work. The incident of unwanted sexual attention had not decreased since the last government-wide survey. Moreover, in 1994, large percentages of service women surveyed for the study stated that they experienced sexual harassment in the workplace; Navy (50%), Air Force (49%), and Army (46%). These percentages exceeded the national government average of 44% (USMSPB, 1995).

The problem of sexual harassment concerns the Department of Defense (DOD) for at least two reasons: mission effectiveness and financial cost. Sexual harassment violates trusts and impairs unit cohesion and personnel readiness. This is probably reason enough for DOD to be vigilant in eliminating it, still there is also a financial cost factor. Estimating the total cost of sexual harassment (reduction in productivity, incident, absenteeism, separation, replacement, transfer, legal, medical, and counseling costs) in the U.S. Army in 1988, researchers calculated the dollar value to be over \$250 million (Faley et al, 1999). Given the rate of inflation, surely the cost would be far greater today.

In the late 1980s, DOD began implementing several initiatives for the purpose of responding to and preventing sexual harassment. A Defense Equal Opportunity Council

(DEOC) composed of senior officials to advise the Assistant Secretary of Defense for Force Management and Personnel on equal opportunity matters, was established in 1987. The following year, DOD administered a survey on sexual harassment of active duty military personnel. Survey results revealed that 64% of the women and 17% of the men reported at least one instance of unwanted, uninvited sexual attention while at work in the 12 months prior to taking the survey, ⁴ the study was replicated in 1995, 2002, and 2006. Each replicated survey revealed that overall reporting rate of sexual harassment had declined. The 1995 study showed that 55% women and 14% men reported having experienced one or more incidents of sexual harassment the year prior to the survey, (U.S. DOD, 1995). In 2003, a Defense Manpower Data Center (DMDC) report revealed that sexual harassment had declined significantly from 1995 to 2002 (Lipari & Lancaster, 2003). This decline in the reports of sexual harassment may be partly attributable to DOD's initiatives to eliminate such acts in the military. However, given the fact that many victims of sexual harassment do not report the incident to anyone, also suggests that sexual harassment is underreported in today's military.

Since 1995, the Under Secretary of Defense for Personnel and Readiness has been charged with developing policies to prevent sexual harassment, as well as reviewing and following-up on all sexual harassment complaints in the services. With regard to education, the Defense Equal Opportunity Management Institute (DEOMI) provides sexual harassment training for all DOD military and civilian personnel assigned to EO, EEO, and human relations programs. DEOMI also supports research on the equal opportunity and sexual harassment climate in the military services. In an effort to resolve issues of sexual harassment and to prevent future occurrences, it is important for the Department of Defense to examine both its causes and effects. Although, both are mentioned in this paper, the current study focuses on the effects of sexual

harassment in Air Force units. This is an exploratory study intended to test the relationship between sexual harassment and demographic, organizational, and equal opportunity variables that are found in the Defense Equal Opportunity Climate Surveys.

Conceptualizing Sexual Harassment

The definition of sexual harassment is broad and at times imprecise, making it a difficult concept to *rationalize*. That is, it is not always clear how to measure the concept of sexual harassment appropriately. In much of the published literature, sexual harassment is separated into three conceptual categories: crude/offensive behavior (offensive verbal/nonverbal behaviors), unwanted sexual attention (attempts at establishing a sexual relationship), and sexual coercion (*quid pro quo*). Examples of questions that were used in previous studies to measure crude/offensive behavior, as well as, other forms of sexual harassment, can be found in the Defense Manpower Data Center's 2006 survey on gender relations. One such question is as follows: "[Did he/she] touch you in a way that made you feel uncomfortable?" A question that was used in surveys to measure unwanted sexual attention is: "[Did he/she] intentionally corner you or lean over you in a sexual way?" (U.S. DMDC 2006, Appendix, p. 8). These are examples of DOD core measures of sexual harassment that were approved by the USD (P&R) in 2002. Through the use of classical test theory, item response theory, and factor analysis, these items, and more, found to be reliable measures of sexual harassment (U.S. DMDC, 2006).

In addition to the three conceptual categories, there are three broad causal theories of sexual harassment: organizational, socio-cultural, and bio-social. These theories attempt to explain why sexual harassment occurs and are useful to reference in a causal analysis. Although, a causal analysis is beyond the scope of the present study, it is useful to briefly outline these theories. The organizational perspective asserts that sexual harassment occurs because of

structural conditions that exist within organizations. For example, vulnerability to sexual harassment may be determined by the lack of power of one's position within an organizational structure. Similarly, skewed minorities, also referred to as "tokens," are powerless due to their low-level representation in the organization, and thereby vulnerable to sexual harassment (Kanter, 1977, 1987). Two additional examples of variables explored in an organizational framework are workplace norms, and sex of the supervisor. A socio-cultural perspective focuses on the patriarchal aspect of society and the traditional sex role expectation of women and men. The bio-social model asserts that sexual harassment can be explained in terms of biologically driven mating behavior (Studd & Gattiker, 1991; Tangri et al., 1982). The model assumes that there is a natural attraction between prospective mates.

Finally, sexual harassment may be conceptualized at one of two levels of analyses, at the individual level reflecting harassment that is personally experienced and at a global level reflecting perceptions about the organizational environment. At the individual level, sexual harassment includes, but is not limited to, harassment in which submission is made a condition of employment (or *quid pro quo*). Global or organizational harassment refers to a hostile work environment. Given that commitment, cohesion, and sense of community are essential components of an effective military unit, sexual harassment not only adversely affects individual service members, but it has a negative effect on the entire unit.

Previous Studies

Research on sexual harassment has been vast and numerous. Some studies reveal that women are more likely than men to experience sexual harassment, and although sexual harassment is prevalent among women in the workplace (Gutek, 1985; Brooks & Perot, 1991) only a small percentage of women who have been sexually harassed report it to authorities or file

a complaint (Marin & Guadagno, 1999; Fitzgerald et al., 1988; Fitzgerald & Shullman, 1993). This is true of service members who have been sexually harassed as well as employees in civilian organizations. Reluctance of service members to report such incidents is evident in a recent DEOMI Technical Report. Examining data from the 2002 Sexual Harassment Survey, Firestone and Harris found that units with the highest reports of sexist behavior had the most missing responses on the sexual harassment question. They concluded that service members are reluctant to report such incidents (Firestone & Harris, 2008).

Rates of sexual harassment were particularly high in workplaces where women were traditionally under-represented, such as the trades and the professions (Fitzgerald & Shullman, 1993). Sexual harassment has a negative effect on job satisfaction (Morrow et al., 1994). According to Hanisch and Hulin (1990), it is the feeling of distress caused by sexual harassment that leads to decreased job satisfaction and an increase of work.

Factors that have been found in the literature to affect sexual harassment have been such variables as age, marital status, and education. In one study, women who were young, single, and less well educated were more vulnerable to sexual harassment than women who were older, married, and well educated (Hesson-McInnis & Fitzgerald, 1997). Additionally, studies suggest that environmental harassment, such as has a negative effect on reenlistment intentions of both men and women, albeit stronger for women; and individualized harassment was a significant predictor of male reenlistment, but not female re-enlistment (Firestone & Harris, Tech Report 18-08, summer 2008).

Examining the effects of sexual harassment on the psychosocial reactions of victims, Pryor (1995) found that the organizational role of the harasser was the strong predictor.

Additionally, Pryor found that it is necessary to know the nature of the harassment before

determining what kinds of psychosocial reactions the victim will have. That is, "if the harasser possessed organizational power over the victim, the victim was more likely to experience productivity problems or negative attitudes toward the organization (Pryor, 1995, p. 597)." Pryor also found that more coercive forms of sexual harassment resulted in the victim having more emotional problems or problems in her family relations.

Krings and Facchin (2009) examined the relationship between men's perceptions of organizational justice and their proclivities to sexually harass. Among their findings, if males perceived injustices in their work organizations, then they were more likely to sexually harass. Sexual harassment proclivities were found for men low in agreeableness and high in hostile sexism. Thus, a male's individual differences in hostility toward women affect how he reacts to perceived unfairness.

Research has also shown that the more educated men and women are about sexual harassment, the more likely they are to report it. Examining longitudinal data drawn from the Office of Personnel Management's Central Personnel Data File for the years 1978, 1987, and 1994, Antecol and Cobb-Clark (2004) found an increase the reporting of sexual harassment among civilian employees. In their study, respondents were asked whether they experienced one or more of six unwanted sexual behaviors on the job in the previous 24 months. Using a probit model, they found that change over time was explained less by changes in the distribution of workers' demographic or job characteristics and more by the increase in the propensity of men and women to define the situation as sexual harassment.

Since 2002, the Defense Manpower Data Center (DMDC) administers human relations surveys annually to active duty men and women on behalf of the Office of the Under Secretary of Defense for Personnel and Readiness (OUSD [P&R]). In 2006, DMDC asked several

questions about sexual harassment and sexist behavior. Using items derived from the sexual harassment questionnaire developed by Fitzgerald et al.(1988); Fitzgerald, Gelfand, and Drasgow (1995), DMDC researchers measured sexual harassment and sexist behavior which they refer to as "unwanted gender-related experiences." Among their many findings, 52% of the women and 29% of the men stated that they had experienced crude/offensive behavior. Although these percentages are high, they were lower in 2006 than they were in 1995, showing a decline in unwanted gender-related experiences among active-duty men and women.

This study also showed that women in the Air Force (40%) were less likely to experience crude/offensive behavior that women in the Marine Corps (63%), Army (58%), or Navy (57%). Further, 81% of women who experienced unwanted gender-related behaviors indicated that some or all of the behaviors occurred at a military installation. Junior enlisted women (40%) were more likely than senior enlisted women (14%), junior officer women (13%), and senior officer women (6%) to indicate that some or all behaviors occurred in living quarters (USDMDC, 2007).

Hypotheses

Hypothesis 1: As illustrated in previous studies, we would expect sexual harassment to have a negative effect on job satisfaction.

Hypothesis 2: There is an inverse relationship between sexual harassment and a service members' intention to remain in the service.

Hypothesis 3: There is an inverse relationship between sexual harassment and perceived unit effectiveness.

Hypothesis 4: There is an inverse relationship between sexual harassment and perceived unit cohesion.

Hypothesis 5: There is an inverse relationship between sexual harassment and perceived service commitment.

Data and Methods

Data

The data analyzed in this paper are drawn from the Defense Equal Opportunity Climate Surveys (DEOCS), FY 2009. This instrument is designed to measure military equal opportunity climate factors as well as organizational effectiveness, and civilian equal opportunity issues. The strength of the questionnaire is its use as an assessment tool in examining shared perceptions of respondents regarding organizational policies and practices. Such a tool is beneficial to commanders

The original dataset includes both military and civilians employees. For this study, Air Force military respondents for FY 2009 were selected and civilian personnel and other military branches were deleted from the file, leaving a total sample size of 12, 228. As indicated in Table 1, women comprise 17.2% of the sample. Seventy-three percent of the sample is white, 10% is African American, 3.5% is Hispanic, 2.4% is Asian, and approximately 1% is Native American or Hawaiian/Pacific Islander. Eighty-nine percent of the sample is enlisted, and 11% is officers. Over half of the sample was 30 years of age or younger, the modal age cohort was 22-30 (See Figure 1, Appendix D). Twenty percent of the sample was deployed to a combat zone when surveyed; another 5% was deployed to a non-combat zone (See Figure 2, Appendix E). The greatest percentage of respondents stated that they disagreed with the statement: "Assuming I could stay until eligible for retirement, I do not see many reasons to do so." This suggests that the greatest percentage of respondents intend to remain in the military until retirement (Figure 3,

Appendix F). Approximately 5% indicated that they had personally experienced sexual harassment (See Table 1, Appendix A).

Variable Selection

The independent variable for this study is whether or not a respondent experienced sexual harassment within 12 months of being surveyed. In addition, there were three control variables entered into the regression model: age, race, and gender.

There were five dependent variables tested in five separate linear regression models: job satisfaction, retention, unit effectiveness, unit cohesion, and commitment. Job satisfaction is measured by item 62 on the questionnaire asking the respondent how satisfied the respondent is with her/his job as a whole. Approximately 12% of the respondents indicated that they were either very or moderately satisfied with their military job as a whole, and 13% said they were neither satisfied nor dissatisfied with their jobs. Three-quarters of the men and women in the sample stated that they were satisfied with their military jobs. Of those men and women who indicated that they were not satisfied with their jobs percent also stated that they only a small percent stated that there is no reason to remain in the military.

Retention is measured by item 40 on the questionnaire: *Assuming I could stay until eligible for retirement, I do not see many reasons to do so.* Twenty-four percent of the respondents indicated that they did not see many reasons to stay in the military and 18% neither agreed nor disagreed. Most of the respondents (58%) indicated that they see many reasons to stay in the military suggesting that their propensity to re-enlist is probably high.

Six items on the survey addresses the issue of sexual harassment: question 23, When a person complained of sexual harassment the supervisor said, "You're being too sensitive;" question 26, A supervisor referred to subordinates of one gender by their first name in public

while using titles for subordinates of the other gender; question 27, Sexist jokes were frequently heard; question 28, Someone made sexually suggestive remarks about another person; question 64, Within the past 12 months, I have personally experienced and incident of sexual harassment within my current organization; and question 65: "Did you report any of the above incidents of discrimination or sexual harassment to someone in your organization? Results of the first four items were combined to formulate a sexual harassment scale with which we test for perceived or global sexual harassment. I used item 64 to measure individual experienced sexual harassment.

Methods

This study is based on a grouped analysis. To justify aggregating the individual level data to the organizational level, rwg (measures of agreement) were computed. Variable scores were aggregated and within group agreement were measured using rwg for multiple items method as described by James, Damaree, and Wolf (1984). Aggregated scores were used in calculating group averages. Linear regression models were then run on the aggregated group file.

Effects of sexual harassments on each of the independent variables were tested using separate regression models (See Table 3, Appendix C). In each case, the independent variable was entered into a model and the control variables: sex and age were added to the model to test for changes in variance.

Results

Correlation Matrix

A Pearson Correlation, two-tailed significance test was performed on the variables. As illustrated in Table 1 (See Appendix A), all of the variables were significant with the exception of sex represented by percent women (PWOMEN). The percent harassment a unit has is highly

correlated with the mean unit effectiveness (r=-432), mean unit cohesion (r=.301), mean age (r=.326), and mean retention (r=-.357). All of these values are negative, therefore, the more sexual harassment, the less unit effectiveness, the less unit cohesion, the younger the members involved, and the lower the retention rate is likely to be.

Regression Models

As shown by the r-squares in Table 3, Appendix C, most of the regression models in this study are strong. The model testing effects of sexual harassment on mean retention has an r-square of .266 indicating that it explains 27% of the variance. Similarly, the r-square for the model testing effects of sexual harassment on unit effectiveness is .307, thus 31% of the variance is explained by the model. Models testing the effects of sexual harassment on perceived unit cohesion and mean commitment have r-squares of .202 and .220 respectively. Unlike the other models, the r-square testing the effect of sexual harassment on mean job satisfaction only explains 8% of the variance and therefore is low (See Table 3, Appendix C).

There is a negative relationship between percent harassed in Air Force units and the mean job satisfaction. As indicated in Table 3, β = -.186 which is not significant. In addition, neither of the control variables (age or sex), had a significant effect on job satisfaction. As stated above, the model is not strong.

Sexual harassment has a significant effect on Air Force units' mean retention, with a beta of -.084 which is significant at the .05 level. In the same model, the unit's mean age is a significant predictor of retention. That is, older service members are more likely to remain in service (See Table 3, Appendix C). Similarly, both sexual harassment and age predicts perceived unit effectiveness (β = -.311 and .368 respectively). As expected, there is a negative

relationship between sexual harassment and mean unit effectiveness. As for age, older service members are more likely to perceive the unit as being effective.

Contrary to the hypotheses, sexual harassment does not have a significant effect on unit cohesion or commitment. While age has a significant, positive effect on unit cohesion, it does not have a significant effect on commitment.

Discussion and Concluding Remarks

Over the last two and half decades, sexual harassment has been recognized as a serious problem in the workplace. This has become particularly noticeable with the increase in women entering the workforce in recent years as well as a societal emphasis on equal rights for women. Although, men are sometimes victims of unwanted sexual attention, women are more likely to be sexually harassed.

The results of this exploratory study illustrate that in Air Force units, sexual harassment has a significant negative effect on perceived unit effectiveness, unit cohesion, and percent retention. Judging from the r-squares, these models are strong, explaining between 20 and 31% of the variance. These data warrant further investigation to determine both the frequency and intensity of the problem in Air Force units as well as in other military services.

There are some limitations with the data of this study that need to be noted. First, there is problem of self-labeling. That is, respondents of the DEOCS were explicitly asked whether they had experienced sexual harassment. This is a problem that has been recognized in large survey data and can be corrected for in future studies (Magley et al., 1999; Munson et al., 2001).

Another limitation is that the DEOCS has too few items on sexual harassment. Additional items would allow for a more detailed analysis of sexual harassment in Air Force units, and some

recommendations for eradicating it. Nonetheless, the information provided in this study allows provides a good first step for a more extensive study on a very important issue.

References

- Antecol, H., & Cobb, D. (2004). The changing nature of employment-related sexual harassment: evidence for the U.S. federal government. 1978–1994, Industrial and Labor Relations

 Review, 57(3), 443-461
- Bastian, L.D., Landcaster, A.R., & Reyst, H.E. (1995). *Department of Defense 1995 sexual harassment survey*. Arlington, Virginia: Defense Manpower Data Center.
- Brooks, L., & Perot, A.R. (1991). Reporting sexual harassment: Exploring a predictive model.

 *Psychology of Women Quarterly, 15, 31–47.
- Firestone, J. & Harris, R. (2008). What effect does sexual harassment have on service members' morale and intention to reenlist (DEOMI Technical Report 04–08)? Patrick AFB, FL: DEOMI.
- Firestone, J. & Harris, R. (1999). Changes in the patterns of sexual harassment in the U.S. Military: A comparison of 1988 and 1995 DOD surveys. *Armed Forces and Society*.
- Fitzgerald, L. F., Drasgow, F., Hulin, C.L., & Gelfand, M.J. (1997). Antecedents and consequences of sexual harassment in organizations: A test of an integrated model. *Journal of Applied Psychology*, 82, 578–589.
- Fitzgerald, L. F., Drasgow, F. & Magley, V.J. (1999). Sexual harassment in the armed forces: A test of an integrated model. *Military Psychology*, 11, 329–343.
- Fitzgerald, L.F., & Hesson-McInnis, M. (1989). The dimensions of sexual harassment: A structural analysis. Journal of Vocational Behavior, 35, 309–326.
- Fitzgerald, L. F., & Shullman, S.L. (1993). Sexual harassment: a research analysis and agenda for the 1990s. *Journal of Vocational Behavior*, 42, 5–27.

- Fitzgerald, L.F., Shullman, S., Bailey, N., Richards, M., Swecker, J., Gold, Y., Ormerod, A.J., & Weitzman, L. (1988). The incidence and dimensions of sexual harassment in academia and the workplace. *Journal of Vocational Behavior*, 32, 1523–175.
- Hanisch, K. A. & Hulin, C.L. (1990). Job attitudes and organizational withdrawal: and examination of retirement and other voluntary withdrawal behaviors. *Journal of Vocational Behavior* 37, 60–78.
- Hesson-McInnis, M., & Fitzgerald, L. F. (1997). A preliminary test of an integrated model, 27, *Journal of Applied Social Psychology*, 877.
- Krings, F. & Facchin, S. (2009). Organizational justice and men's likelihood to sexually harass: the moderating role of sexism and personality. *Journal of Applied Psychology*, 94 (2), 501–510.
- Gruber, J. E. (1997). An epidemiology of sexual harassment: evidence from North America and Europe. In W. O'Donohue (Ed.), *Sexual harassment: Theory, research, and treatment* (pp.84–98). Boston: Allyn & Bacon.
- Gutek, B. A. (1985). Sex and the Workplace: The Impact of Sexual harassment of Men on Women in Organizations. San Francisco: Jossey-Bass.
- Gutek, B. A., Cohen, A.G. & Konrad, A.M. (1990). Predicting social-sexual behavior at work:

 A contact hypothesis. *Academy of Management Journal*, 33: 560–577.
- Gutek, B. A., Morasch, B., & Cohen (1983). Interpreting social-sexual behavior in a work setting. *Journal of Vocational Behavior*, 22, 30–48.
- Gutek, B, A., & Morasch, B. (1982). Sex-ratios, sex-rolle spillover, and sexual harassment of women at work. *Journal of Social Issues*, 38, 55–74.

- Heilman, M. E., Rivero, J.C., & Brett, J.F. (1991). Skirting the competence issue: Effects of sex-based preferential selection on task choices of women and men. *Journal of Applied Psychology*, 76, 99–105.
- Hemming, H. (1985). Women in a man's world: sexual harassment. *Human Relations*, 38, 67–79.
- Hunter-Williams, J., Fitzgerald, L.F., & Drasgow, F. (1999). The Effects of Organizational Practices on sexual harassment and individual outcomes in the military. *Military Psychology*, 11, 303–328.
- James, L.R., Demaree, R.G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology*. 69, 85–98.
- Kanter, R. M. (1977a). Men and Women in Corporations. New York: Basic Books.
- Kanter, R.M. (1977b). Some effects of proportions on group life: skewed sex ratios and responses to token women." *American Journal of Sociology*, 82,965–994.
- Konrad, A. M., & Gutek, B.A. (1986). Impact of work experiences on attitudes toward sexual harassment. *Administrative Science Quarterly*, 31, 422–438.
- Lamband, D. & Lentz, B. (1998). The effects of sexual harassment on job satisfaction, earnings and turnover among female lawyers. *Industrial and Labor Relations Review*, 51(4).
- Langhout, R. D., Bergman, M.E., Cortina, L.M, Fitzgerald, L.F., Drasgow, F. & Williams, J.H. (2005). Sexual harassment severity: assessing situation and personal determinants and outcomes. *Journal of Applied Social Psychology*, 35, 975–1007.
- Lipari, R., Lancaster, A.R., & Jones, A.M. (2003). *Armed Forces 2002 Sexual Harassment Survey*. Arlington, Virginia: Defense Manpower Data Center.

- Magley, V. J., Waldo, C.R., Drasgow, F. & Fitzgerald, L.F. (1999). The impact of sexual harassment on military personnel: Is it the same for men and women? *Military Psychology*, 11, 283–302.
- Magley, V. J., Hulin, C. L., Fitzgerald, L. F., & DeNardo, M. (1999). Outcomes of self-labeling sexual harassment. *Journal of Applied Psychology*, 84, 390–402.
- Morrow, P.C., McElroy, J.C., & Phillips, C.M. (1994). Sexual harassment behaviors and work related perceptions and attitudes. *Journal of Vocational Behavior*, 45, 295–309.
- Moskos, C. C., Williams, J. A, & Segal, D. R. *The postmodern military: Armed forces after the cold war*. Oxford: Oxford University Press, 2000.
- Munson, L. J., Miner, A.G., & Hulin, C. (2001). Labeling sexual harassment in the military: An extension and replication. *Journal of Applied Psychology*, 86, 293–303.
- Pryor, J. B. (1995). Psychosocial impact of sexual harassment on women in the U.S. military.

 *Basic and Applied Social Psychology, 17(4), 581–603.
- Pryor, J. B., Giedd, J.L., & Williams, K.B. (1995). A social psychological model for predicting sexual harassment. *Journal of Social Issues*, 51, 69–84.
- Pryor, J. B., & Whalen, N.J. (1997). A typology of sexual harassment—characteristics of harassers and the social circumstances under which sexual harassment occurs. In W.
 O'Donohue (Ed.), Sexual Harassment: Theory, Research and Treatment, pp. 129–151.
 New York: Allyn and Bacon.
- Ragins, B. R., & Scandura, T.A. (1995). Antecedents and work-related correlates of reported sexual harassment: an empirical investigation of competing hypotheses. *Sex Roles*, 32, 429–455.

- Rotundo, M, Nguyen, D.H., & Sackett, P.R. (2001). A meta-analytic review of gender differences in perceptions of sexual harassment. *Journal of Applied Psychology*, 86, 914-922.
- Stark, S., Chernyshenko, O.S., Lancaster, A.R., Drasgow, F., & Fitzgerald, L.F. (2002). Toward standardized measurement of sexual harassment: Shortening the SEQ-DOD using item response theory. *Military Psychology*, 14, 49–72.
- Stringer, D. M., Remick, H., Salisbury, J., & Ginorio, A.B. (1990). The power and reasons behind sexual harassment: An employer's guide to solutions. *Public Personnel Management*, 19, 43–52.
- Studd, M. V. & gattiker, U. E. (1991). The evolutionary psychology of sexual harassment in organizations. *Ethology and Social Biology*, 12, 249–290.
- Tangri, S., Burt, M.R., & Johnson, L.B. (1982). Sexual harassment at work: Three explanatory models. *Journal of Social Issues*, 38, 33–54.
- U.S. Defense Equal Opportunity Management Institute. (2007). *Demographic Trend FY*Summary Representation of race/Ethnic Groups and Women in the Active Armed Forces

 1997–2007. Patrick AFB, FL: DEOMI.
- U. S. Defense Manpower Data Center. (2006). Gender Relations Survey of Active Duty

 Members. Arlington, VA: Defense Manpower Data Center.
- U.S. Defense Manpower Data Center. (2002). Armed Forces 2002 Sexual Harassment Survey.Arlington, VA: Defense Manpower Data Center.
- U. S. Defense Manpower Data Center. (1995). Sexual harassment survey study. Retrieved July2, 2010 from http://www.defense.gov/news/fact_sheets/sxhas95.html.

- U. S. Defense Manpower Data Center. (1988). *DOD survey of sex roles in the active duty*military. Arlington, VA: Defense Manpower Data Center.
- U.S. Merit Systems Protection Board. (1995). Sexual harassment in the federal workplace:

 Trends, progress, and continuing challenges. Washington, DC: U.S. Government

 Printing Office.
- U.S. Merit Systems Protection Board. (1981). Sexual harassment of federal workers: Is it a problem. Washington, DC: U.S. Government Printing Office.

Footnotes

- 1. The female soldiers accompanying male combat troops are called, "*Team Lioness*." These women are able to conduct searches of Iraqi women without violating cultural norms (See http://www.pbs.org/independentlens/lioness/)
- 2. In 2007, women comprised 14 percent in the Army, 16 percent in the Marine Corps, 15 percent in the Navy, and 12 percent of the Coast Guard.
- 3. Equal Employment Opportunity Commission (EEOC) defines sexual harassment (See http://www.eeoc.gov/laws/types/sexual_harassment.cfm)
- 4. These results are still available online at the following address www.defense.gov/news/fact_sheets/sxhas95.html.

Appendix A

Table 1.

Demographic Variables of U.S, Air Force Military Personnel (DEOCS FY 2009)

VARIABLE	FREQ	%
Female	732	17.2
Male	3523	82.8
White	3103	72.9
African American	408	9.6
Hispanic	147	3.5
Asian	101	2.4
Native American	48	1.1
Hawaiian/Pacific Islander	32	.8
Enlisted	3801	89.3
Officers	456	10.7
Deployed to War Zone	840	19.7
Exp. Sex Harassment in 12	237	5.6
mos.		
Age: 18-30	2276	53.4
Age: 31-40	1139	26.8
Age: >40	834	19.6

Appendix B

Table 2

Correlation Matrix

	PHARA	MNUNI	MNUNI	PWO	MNA	MNCOM	MNJOB
	SS	TEF	TCO	MEN	GE	MIT	SAT
PHARASS							
MNUNITE	432**						
F							
MNUNITC	301**	.718**					
O							
PWOMEN	.041	017	.008				
MNAGE	326**	.467**	.414**	.073			
MNCOMM	223*	.625**	.713**	.165	.440**		
IT							
MNJOBSA	238*	.611**	.642**	.042	.227*	.786**	
T							
MNRETEN	357**	.591**	.629**	.055	.467**	.869**	.736**
TION							

^{**} p < .01 (2-tailed)

^{*}*p* < .05 (2-tailed)

Appendix C

Table 3

Linear Regression Results Predicting Effects of Sexual Harassment Controlling for Age and Gender

Dependent Variable = Mean Job Satisfaction

Independent Variables	Coefficient	Standard Error	В	
Percent Women	.001	.002	.038	
Mean Age	.081	.052	.164	
Percent Harassed	005	.003	186	
Constant	****	*****	*****	
$R^2.083 \Delta R^2.031$				

Dependent Variable = Mean Retention

Variable	Coefficient	Standard Error	β	
Percent Women	.001	.003	.036	
Mean Age	.380	.092	.388**	
Percent Harassed	004	.005	084**	
Constant	****	*****	*****	
R^2 .266 ΔR^2 .048				

Dependent Variable = Mean Unit Effectiveness

Variable	Coefficient	Standard Error	В	
Percent Women	001	.001	051	
Mean Age	190	.047	.368**	
Percent Harassed	009	.003	311**	
Constant	****	*****	*****	
$R^2 .307 \Delta R^2 .086$				

Dependent Variable = Unit Cohesion

Variable	Coefficient	Standard Error	В	
Percent Women	.000	.002	010	
Mean Age	.202	.056	.354**	
Percent Harassed	006	.003	185*	
Constant	****	*****	*****	
$R^2 .202 \Delta R^2 .030$				

Dependent Variable = Mean Commitment

Variable	Coefficient	Standard Error	В
Percent Women	.003	.002	.141
Mean Age	.303	.074	.397**
Percent Harassed	004	.004	099

Constant ***** ****** ******

 $R^2 .220 \Delta R^2 .009$

^{**} *p* < .01

^{*}*p* < .05

Appendix D

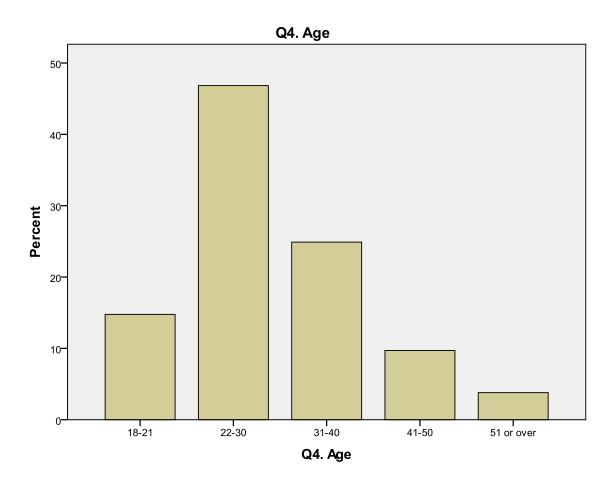
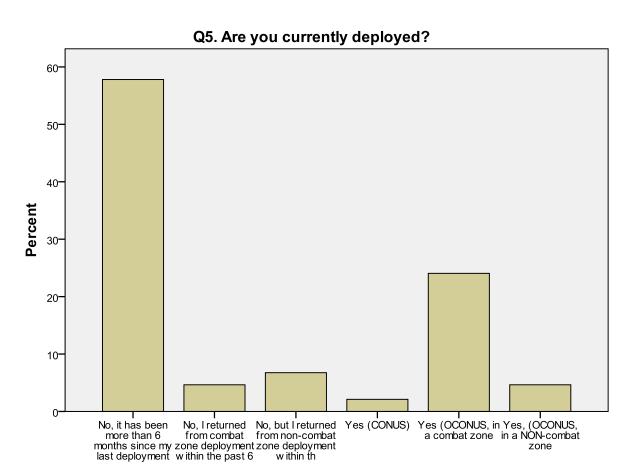


Figure 1. Percent Age

Appendix E

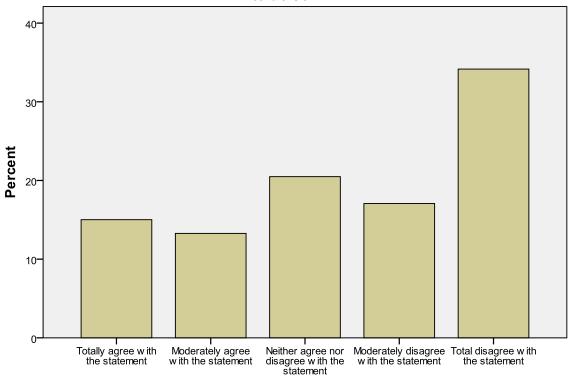


Q5. Are you currently deployed?

Figure 2. Percent Deployed

Appendix F

Q40. Assuming I could stay until eligible for retirement, I do not see many reasons to do so



Q40. Assuming I could stay until eligible for retirement, I do not see many reasons to do so

Figure 3. Retention